NPDES DMR Data Elements Included in the ECHO Data Download

The Enforcement and Compliance History Online (ECHO) system incorporates Discharge Monitoring Report (DMR) data submitted by NPDES permit holders to the States or directly to EPA via the US EPA Central Data Exchange (CDX). This compendium of DMR data identifies the permit conditions or limits for each water discharge location, the actual values, identified by the permittee, for each monitored pollutant that were discharged, and whether or not the amounts discharged exceeded the permit limits. At EPA, DMR data is stored in the Office of Enforcement Compliance Assurance, Integrated Compliance Information System (ICIS) where it is extracted by ECHO.

1.1 DMR DESCRIPTION

The download data comprises comma-separated value files, one for each fiscal year since 2009- 2014, available in individual zip files. Each zip file is named npdes_dmrs_fy*xxxx*.zip and each CSV is named npdes_dmr_fy*xxxx*.csv, where xxxx is the fiscal year (e.g. npdes_dmrs_fy2014.zip).

The data contained in the download file is comprised of selected data columns from the following ICIS tables:

IDEA_ICIS	ICIS_DMR
IDEA_ICIS	ICIS_DMR_EVENT
IDEA_ICIS	ICIS_DMR_FORM
IDEA_ICIS	ICIS_DMR_FORM_PARAMETER
IDEA_ICIS	ICIS_DMR_FORM_VALUE
IDEA_ICIS	ICIS_DMR_VALUE
IDEA_ICIS	ICIS_LIMIT
IDEA_ICIS	ICIS_LIMIT_SET
IDEA_ICIS	ICIS_LIMIT_SET_SCHEDULE
IDEA_ICIS	ICIS_LIMIT_SET_STATUS
IDEA_ICIS	ICIS_LIMIT_VALUE
IDEA_ICIS	ICIS_PERMIT
IDEA_ICIS	ICIS_PERM_FEATURE

1.2 ICIS-NPDES DATA ELEMENTS

Element Name	Data Type	Length
NPDES DMR (NPDES_DMR_FY*xxxx*.csv)		
ACTIVITY_ID	NUMBER	22
EXTERNAL_PERMIT_NMBR	VARCHAR2	9
VERSION_NMBR	NUMBER	22
PERM_FEATURE_ID	NUMBER	22
PERM_FEATURE_NMBR	VARCHAR2	4
PERM_FEATURE_TYPE_CODE	VARCHAR2	3
LIMIT_SET_ID	NUMBER	22
LIMIT_SET_SCHEDULE_ID	NUMBER	22
LIMIT_ID	NUMBER	22
LIMIT_BEGIN_DATE	DATE	7
LIMIT_END_DATE	DATE	7
NMBR_OF_SUBMISSION	NUMBER	22
PARAMETER_CODE	VARCHAR2	5
PARAMETER_DESC	VARCHAR2	100
MONITORING_LOCATION_CODE	VARCHAR2	3
STAY_TYPE_CODE	VARCHAR2	1
LIMIT_VALUE_ID	NUMBER	22
LIMIT_VALUE_TYPE_CODE	VARCHAR2	3
LIMIT_VALUE_NMBR	NUMBER	22
LIMIT_UNIT_CODE	VARCHAR2	2
LIMIT_UNIT_DESC	VARCHAR2	13
STANDARD_UNIT_CODE	VARCHAR2	2
STANDARD_UNIT_DESC	VARCHAR2	13
LIMIT_VALUE_STANDARD_UNITS	NUMBER	22
STATISTICAL_BASE_CODE	VARCHAR2	3
STATISTICAL_BASE_TYPE_CODE	VARCHAR2	3
LIMIT_VALUE_QUALIFIER_CODE	VARCHAR2	3
STAY_VALUE_NMBR	NUMBER	22
DMR_EVENT_ID	NUMBER	22
MONITORING_PERIOD_END_DATE	DATE	7
DMR_FORM_VALUE_ID	NUMBER	22
VALUE_TYPE_CODE	VARCHAR2	3
DMR_VALUE_ID	NUMBER	22
DMR_VALUE_NMBR	NUMBER	22
DMR_UNIT_CODE	VARCHAR2	2
DMR_UNIT_DESC	VARCHAR2	13
DMR_VALUE_STANDARD_UNITS	NUMBER	22
DMR_VALUE_QUALIFIER_CODE	VARCHAR2	3

Element Name	Data Type	Length
VALUE_RECEIVED_DATE	DATE	7
DAYS_LATE	NUMBER	22
NODI_CODE	VARCHAR2	3
EXCEEDENCE_PCT	NUMBER	22
NPDES_VIOLATION_ID	NUMBER	22
VIOLATION_CODE	VARCHAR2	5
RNC_DETECTION_CODE	VARCHAR2	3
RNC_DETECTION_DATE	DATE	7
RNC_RESOLUTION_CODE	VARCHAR2	3
RNC_RESOLUTION_DATE	DATE	7

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2. NPDES DMR Data Element Definitions

The following is a list of the data elements and ICIS-derived elements that appear in the IDEA NPDES DMR download.

ACTIVITY_ID - The unique identifier for an activity performed at or related to a particular site.

EXTERNAL_PERMIT_NMBR - The unique identifier for a Permit.

VERSION_NMBR - The version of the permit when a modification or reissuance is applied to the permit.

PERM_FEATURE_ID - The unique system identifier of a permitted feature.

PERM_FEATURE_NMBR - The identifier assigned for each location at which permit conditions are being applied.

PERM_FEATURE_TYPE_CODE - The code indicating the type of permitted feature (e.g., External Outfall, Sum).

LIMIT_SET_ID - The system-generated unique identifier for a limit set.

LIMIT_SET_SCHEDULE_ID - The system-generated unique identifier of the Limit Set Schedule.

LIMIT_ID - The unique identifier for a limit parameter record.

LIMIT_BEGIN_DATE - The date on which a limit starts being in effect for a particular parameter in a limit set.

LIMIT_END_DATE - The date on which a limit stops being in effect for a particular parameter in a limit set.

NMBR_OF_SUBMISSION - The attribute stores the number of months for submitting the DMRs for the limit set (e.g., monthly = 1, semi-annually = 6, quarterly = 3); this data element will be blank for Unscheduled Limit Sets.

PARAMETER_CODE - The unique code identifying the parameter being limited and/or monitored.

PARAMETER_DESC - The description of the parameter.

MONITORING_LOCATION_CODE - The code that the monitoring location at which the monitoring requirement (and effluent limit if limited) applies. One parameter may have several monitoring location requirements pertaining to the same permitted feature.

STAY_TYPE_CODE - The unique identifier of the type of stay applied to a limit (e.g., X, Y, Z), which indicates whether the limits do not appear on the DMR at all, are treated as monitor only, or have a stay value in effect during the period of the stay.

LIMIT_VALUE_ID - The system-generated unique identifier for the Limit Value.

LIMIT_VALUE_TYPE_CODE - The indication of the limit value type (e.g., Quantity 1, Concentration 2).

LIMIT_VALUE_NMBR - The actual limit value number from the Permit or Enforcement Action Final Order.

LIMIT_UNIT_CODE - The code representing the unit of measure applicable to quantity or concentration limits and measurements as entered by the user.

LIMIT_UNIT_DESC - The short description of the unit of measure applicable to limit or DMR values.

STANDARD_UNIT_CODE - The code representing the standard unit of measure applicable to quantity or concentration limits and measurements as entered by the user.

STANDARD_UNIT_DESC - The short description of the standard unit of measure applicable to limit or DMR values.

LIMIT_VALUE_STANDARD_UNITS - The limit value expressed in standard units as calculated by the system.

STATISTICAL_BASE_CODE - The code representing the unit of measure applicable to the limit and DMR values entered by the user (e.g., 30-day average, daily maximum) CHECK DATA STANDARD.

STATISTICAL_BASE_TYPE_CODE - The code indicating whether the statistical base code is a minimum, average, or maximum for purposes of calculating compliance against the limit value.

LIMIT_VALUE_QUALIFIER_CODE - The unique code identifying the limit value operator (e.g., <, T, >, E, =).

STAY_VALUE_NMBR - The numeric limit value imposed during the period of the stay for the limit; if entered, during the stay period, the system will use this limit value for calculating compliance rather than the actual limit value.

DMR_EVENT_ID - The sequence ID identifying the DMR Event.

MONITORING_PERIOD_END_DATE - The date that the monitoring period for the values covered by this DMR Form ends.

DMR_FORM_VALUE_ID - The sequence ID identifying the DMR Form Value.

VALUE_TYPE_CODE - The indication of the limit value type (e.g., Quantity 1, Concentration 2).

DMR_VALUE_ID - The system-generated unique identifier for the DMR value.

DMR_VALUE_NMBR - The DMR value number reported on the DMR form.

DMR_UNIT_CODE - The code representing the unit of measure applicable to quantity or concentration limits and measurements as entered by the user.

DMR_UNIT_DESC - The short description of the unit of measure applicable to limit or DMR values.

DMR_VALUE_STANDARD_UNITS - The DMR value expressed in standard units as calculated by the system.

DMR_VALUE_QUALIFIER_CODE - The unique code identifying the DMR value operator (e.g., <, T, >, E, =).

VALUE_RECEIVED_DATE - The date the DMR value was received by the regulatory authority.

DAYS_LATE - The system-generated number of days the DMR value is late.

NODI_CODE - The unique code indicating why no DMR Value was submitted by the permittee for a Monitoring Period End Date.

EXCEEDENCE_PCT - The system-generated percent by which the DMR value (or Adjusted Value) exceeded its Limit (or stay) value.

NPDES_VIOLATION_ID - The system-generated unique identifier for the NPDES Violation.

VIOLATION_CODE - The code identifying which type of Violation has occurred (e.g., D80 = Required Monitoring DMR Value Non-Receipt, E90 = Effluent Violation, C20 = Schedule Event Achieved Late).

RNC_DETECTION_CODE - The code indicating the reportable noncompliance (RNC) detected for a violation. Valid code values are:

Code	Description	Code	Description
A	Enforcement Order	P	Enforcement Order, Non-Monthly Average
B	Manual 2A4 - Pass-Through	Q	Manual 2B - Pretreatment
C	Chronic Violation	R	TRC Limitations Exceeded, Non-Monthly Average
D	Manual Other	S	Schedule Violation
E	Manual 2F - Permit Narrative	T	TRC Limitations Exceeded
F	Manual 2G - Violation of Concern	U	Other Violation with TRC Non-Monthly Average
G	Manual 2A1 - Effluent Violation	V	Other Violation with TRC
H	Chronic Violation, Non-Monthly Average	W	Manual 2E - Deficient Report
I	Manual 2A2 - Unauthorized Bypass	X	Manual Other Violation with TRC
J	Manual 2A3 - Unpermitted Discharge	Y	Manual TRC
K	Non-receipt Violation, Non-Monthly Average	Z	Manual Chronic
N	Non-Receipt of DMR/Schedule Report		

RNC_DETECTION_DATE - The date that RNC was detected. It can be entered manually or automatically. In cases in which RNC is detected by ICIS - NPDES, the detection date entered will vary according to the type of violation detected.

RNC_RESOLUTION_CODE - The code indicating the resolution of noncompliance (RNC) for a violation. Valid code values are:

Code	Description
A	NC - Manual Unresolved RNC
B	RE - Manual by EPA/State/Tribal Action
1	NC - Unresolved RNC
2	RE - Back into Compliance
3	RP - Due to Formal Enforcement Action Final Order with Compliance Schedule
4	RP - In Compliance with Formal Enforcement Action Final Order Requirement
5	RE - Resolved RP by NPDES Closure of Enforcement Action Final Order with Compliance Schedule
6	RE - Manual Resolution by Enforcement Action
7	RP - Manual RP - In Compliance with Formal Enforcement Action Order Requirement
8	RP - Manual Due to Formal Enforcement Action Formal Order
9	RE - Manual by Back into Compliance

RNC_RESOLUTION_DATE - The date RNC was marked to its current resolution status. It can be entered manually or automatically.